

What is claimed is:

[Claim 1] 1. A device for displacement of an object (4) a certain distance which object is displaceable between a forward position (9) and a rearward position (10), said device comprising:

a driving unit (14) displaceable between a first position (12) and a second position (13) for driving an object (4) a distance corresponding to a distance between the first and the second positions (12, 13) by means of a friction joint (15) when the driving unit (14) is displaced from the first position to the second position (12, 13), said friction joint being configured to enable displacement of the driving unit (14) and the object (4) relative to each another under the influence of a certain lowest force;

a member (16) arranged to act on the driving unit (14) in a direction towards the second position (13) by means of a spring force; and

an interconnecting component (21) that interconnects the driving unit (14) and the object (4), the interconnecting component (21) having a surface (22) that forms the friction joint (15) in cooperation with a surface (23) of the driving unit, and the interconnecting component (21) and the object (4) being interconnected so that the interconnecting component (21) and the object (4) are locked against displacement relative to one another when the object (4) is acted on in a direction towards the forward position (9) and the interconnecting component (21) is acted on in an opposite direction, for driving the object (4) to the rearward position (10) by means of the interconnecting component (21) when the driving unit (14) is displaced to the second position (13) during influence of a spring member (16) and for driving the driving unit (14) to the first position (12) by means of the interconnecting component (21) when the object (4) is displaced to the forward position (9).

[Claim 2] 2. The device as recited in claim 1, wherein at least one of the interconnecting component (21) and the object (4) is provided with a shoulder (25, 26) for the interconnection of the interconnecting component (21) and the object (4).

[Claim 3] 3. The device as recited in claim 2, wherein the interconnecting component (21) is provided with said shoulder (25) and the object (4) is provided with a corresponding shoulder (26), and the shoulders (25, 26) are arranged to cooperate for interconnecting the interconnecting component (21) and the object (4).

[Claim 4] 4. The device as recited in claim 1, wherein the interconnecting component (21) and the object (4) are arranged relative to each other so that a play space (27) having an extension in a direction which is substantially perpendicular to the displacement direction of the object between the forward and the rearward positions occurs between the interconnecting component (21) and the object (4).

[Claim 5] 5. The device as recited in claim 1, wherein the interconnecting component (21) is provided with at least one portion for taking up any occurring deformation of and/or force from the object to thereby avoids loading the contact surfaces (22, 23) of the friction joint (15).

[Claim 6] 6. The device as recited in claim 1, further comprising:
a first stop (28) against which first stop the driving unit (14) abuts when being in the first position (12) and the object (4) is in the forward position (9).

[Claim 7] 7. The device as recited in claim 6, wherein the driving unit (14) is located substantially between the first stop (28) and the second stop (29), the extension of the driving unit between a surface (30) of the driving unit which is configured to abut against the first stop and a surface (31) of the driving unit which is intended to abut against the second stop is adapted to the distance between

the first stop and the second stop so that, when the driving unit is in the second position (13), the distance between the first stop (28) and the surface (30) of the driving unit (14) which is configured to abut against the first stop (28) corresponds to the distance that the object (4) is displaced from the forward position (9) when the object is displaced from the forward position (9) to the rearward position (10).

[Claim 8] 8. The device as recited in claim 1, further comprising:

a second stop (29), against which second stop the driving unit (14) abuts when being in the second position (13) and the object (4) is in the rearward position (10).

[Claim 9] 9. The device as recited in claim 1, wherein the driving unit (14) is a first sleeve.

[Claim 10] 10. The device as recited in claim 9, further comprising:

a pin (18) around which said first sleeve (14) is arranged substantially concentrically and along which the sleeve is displaceable.

[Claim 11] 11. The device as recited in claim 10, wherein the pin (18) in a first free end (32) thereof is provided with said first stop (28).

[Claim 12] 12. The device as recited in claim 10, wherein the pin (18) in an anchored second end (33) thereof is provided with said second stop (29).

[Claim 13] 13. The device as recited in claim 10, wherein the pin (18) is attached to a component (8) in which the object (4) is slidably journaled.

[Claim 14] 14. The device as recited in claim 1, wherein the interconnecting component (21) is a second sleeve.

[Claim 15] 15. The device as recited in claim 14, wherein said second sleeve (21) is arranged concentrically and externally relative to the first sleeve (14).

[Claim 16] 16. The device as recited in claim 1, wherein said device is configured to cooperate with an object (4) constituted by a piston arranged to cooperate with one or more brake discs (2, 3) for braking thereof when being in the forward position (9).

[Claim 17] 17. An arrangement for braking a vehicle, said arrangement including a device comprising:

a driving unit (14) displaceable between a first position (12) and a second position (13) for driving an object (4) a distance corresponding to a distance between the first and the second positions (12, 13) by means of a friction joint (15) when the driving unit (14) is displaced from the first position to the second position (12, 13), said friction joint being configured to enable displacement of the driving unit (14) and the object (4) relative to each another under the influence of a certain lowest force;

a member (16) arranged to act on the driving unit (14) in a direction towards the second position (13) by means of a spring force; and

an interconnecting component (21) that interconnects the driving unit (14) and the object (4), the interconnecting component (21) having a surface (22) that forms the friction joint (15) in cooperation with a surface (23) of the driving unit, and the interconnecting component (21) and the object (4) being interconnected so that the interconnecting component (21) and the object (4)

are locked against displacement relative to one another when the object (4) is acted on in a direction towards the forward position (9) and the interconnecting component (21) is acted on in an opposite direction, for driving the object (4) to the rearward position (10) by means of the interconnecting component (21) when the driving unit (14) is displaced to the second position (13) during influence of a spring member (16) and for driving the driving unit (14) to the first position (12) by means of the interconnecting component (21) when the object (4) is displaced to the forward position (9).

[Claim 18] 18. A vehicle having a braking arrangement, said braking arrangement including a device comprising:

a driving unit (14) displaceable between a first position (12) and a second position (13) for driving an object (4) a distance corresponding to a distance between the first and the second positions (12, 13) by means of a friction joint (15) when the driving unit (14) is displaced from the first position to the second position (12, 13), said friction joint being configured to enable displacement of the driving unit (14) and the object (4) relative to each another under the influence of a certain lowest force;

a member (16) arranged to act on the driving unit (14) in a direction towards the second position (13) by means of a spring force; and

an interconnecting component (21) that interconnects the driving unit (14) and the object (4), the interconnecting component (21) having a surface (22) that forms the friction joint (15) in cooperation with a surface (23) of the driving unit, and the interconnecting component (21) and the object (4) being interconnected so that the interconnecting component (21) and the object (4) are locked against displacement relative to one another when the object (4) is acted on in a direction towards the forward position (9) and the interconnecting component (21) is acted on in an opposite direction, for driving the object (4) to the rearward position (10) by means of the interconnecting component (21) when the driving unit (14) is displaced to the second position (13) during influence of a spring member (16) and for driving

the driving unit (14) to the first position (12) by means of the interconnecting component (21) when the object (4) is displaced to the forward position (9).

[Claim 19] 19. A method for providing a braking arrangement in a vehicle, said method comprising:

utilizing a device to provide automatic adjustment of a brake piston (4) and a brake disc (2) cooperating with said brake piston at a certain distance (11) relative to one another, said device comprising:

a driving unit (14) displaceable between a first position (12) and a second position (13) for driving an object (4) a distance corresponding to a distance between the first and the second positions (12, 13) by means of a friction joint (15) when the driving unit (14) is displaced from the first position to the second position (12, 13), said friction joint being configured to enable displacement of the driving unit (14) and the object (4) relative to each another under the influence of a certain lowest force;

a member (16) arranged to act on the driving unit (14) in a direction towards the second position (13) by means of a spring force; and

an interconnecting component (21) that interconnects the driving unit (14) and the object (4), the interconnecting component (21) having a surface (22) that forms the friction joint (15) in cooperation with a surface (23) of the driving unit, and the interconnecting component (21) and the object (4) being interconnected so that the interconnecting component (21) and the object (4) are locked against displacement relative to one another when the object (4) is acted on in a direction towards the forward position (9) and the interconnecting component (21) is acted on in an opposite direction, for driving the object (4) to the rearward position (10) by means of the interconnecting component (21) when the driving unit (14) is displaced to the second position (13) during influence of a spring member (16) and for driving the driving unit (14) to the first position (12) by means of the interconnecting component (21) when the object (4) is displaced to the forward position (9).